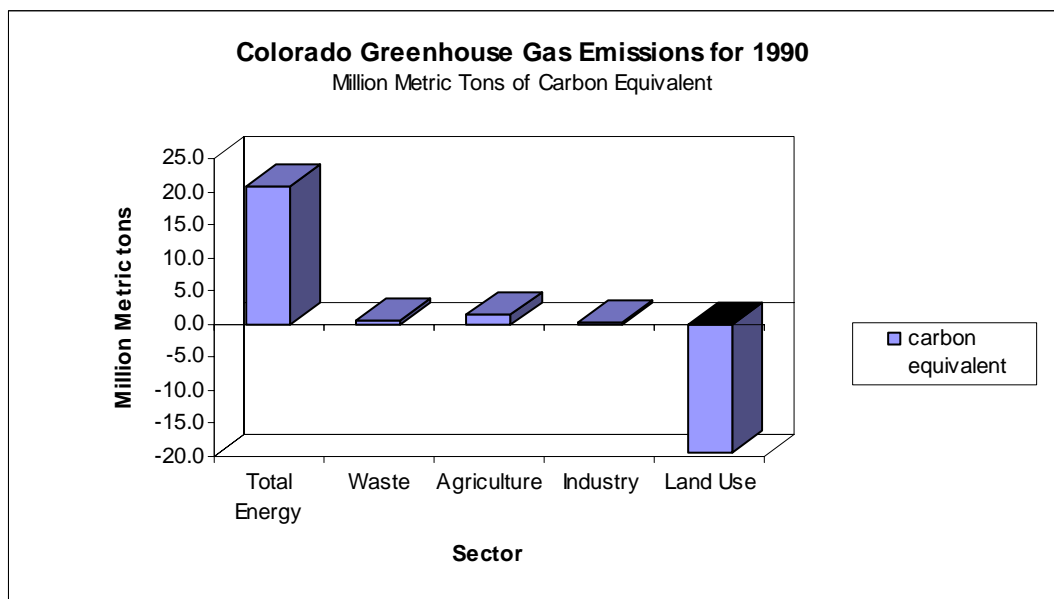


COLORADO GREENHOUSE GAS EMISSIONS AND SINKS INVENTORY: SUMMARY



The report “*Colorado Greenhouse Gas Emissions Inventory & Forecast*” provides a detailed inventory of greenhouse gas emissions and sinks for Colorado in 1990. Emissions were estimated using methods from EPA’s 1995 guidance document ***State Workbook: Methodologies for Estimating Greenhouse Gas Emissions***. In 1990, Colorado emitted 3.5 million metric tons of carbon equivalent (MMTCE). Colorado estimated emissions of more than 3.0 MMTCE from biomass fuels and from other sources not included in the workbook. Emissions from these sources are not included in the reported total or the table below.¹

The principal greenhouse gases were carbon dioxide, comprising 74.1 million metric tons (20.2 MMTCE), and methane, with 0.4 million metric tons (2.5 MMTCE). Other emissions included 3 thousand metric tons of nitrous oxide (0.2 MMTCE). Carbon dioxide sinks (i.e., an increase in forest carbon storage), estimated at 19.5 MMTCE, offset about 85% of total emissions.

¹ Note that the state of the art emission inventory method has advanced since Colorado completed its inventory; therefore, we excluded emission estimates for sources not covered by the most recent inventory guidance (<http://www.epa.gov/ttnchie1/eiip/techrep.htm#green>). These emissions include CFC releases and N₂O emissions associated with development of forests.

Colorado Greenhouse Gas Emissions for 1990

SECTOR	CO ₂ (MMTCE)	Methane (MMTCE)	Nitrous Oxide (MMTCE)	HFCs, PFCs, and SF6 (MMTCE)	Total GHG Emissions (MMTCE)
Energy – Residential	1.6	*	*	*	1.6
Energy – Commercial	1.1	*	*	*	1.1
Energy – Industrial	2.4	*	*	*	2.4
Energy – Transport	5.2	*	*	*	5.2
Energy – Utility	9.6	*	*	*	9.6
Energy – Exported Electricity	*	*	*	*	*
Energy – Other	*	*	*	*	*
Total Energy	20.0	0.8	*	*	20.8
Waste	*	0.5	*	*	0.5
Agriculture	*	1.2	0.2	*	1.4
Industry	0.2	*	*	*	0.2
Land Use	-19.5	*	*	*	-19.5
Total	0.8	2.5	0.2	*	3.5

All emissions are reported in million metric tons of carbon equivalent (MMTCE).

An asterisk (*) indicates that emissions of the gas from this sector were zero, insignificant, or not reported.

Emissions due to coal mining and extraction of natural gas and oil are included in the energy – other figures, and emissions from biofuel combustion are excluded.

The major source of carbon dioxide emissions was fossil fuel combustion (99%), with minor emissions from land use, lime manufacture, and cement manufacturing (1%). Contributors to methane emissions were domesticated animals (45%), coal mining (23%), landfills (18%), oil and natural gas systems (11%), and minor emissions from manure management and wastewater treatment (3%). The sole source of nitrous oxide emissions was fertilizer use.

Colorado emissions in 1990 were 1.1 MTCE per capita, compared to 1990 U.S. emissions of 6.4 MTCE per capita.